**Identify the vertex of the following functions.**

1) 2) 3)

**Describe the shifts/transformations of the following equations and the shape they’d make if you were to graph them.**

4) 5) 6)

**Describe the change that occurs from the function to the equation below.**

7) 8) 9)

**Describe the change that occurs from the function to the equation below.**

10) 11) 12)

**Describe the change that occurs from the function to the equation below.**

13) 14) 15)

16) **Identify the domain of the functions.** 17) **Identify the range of the functions.**

a) a)

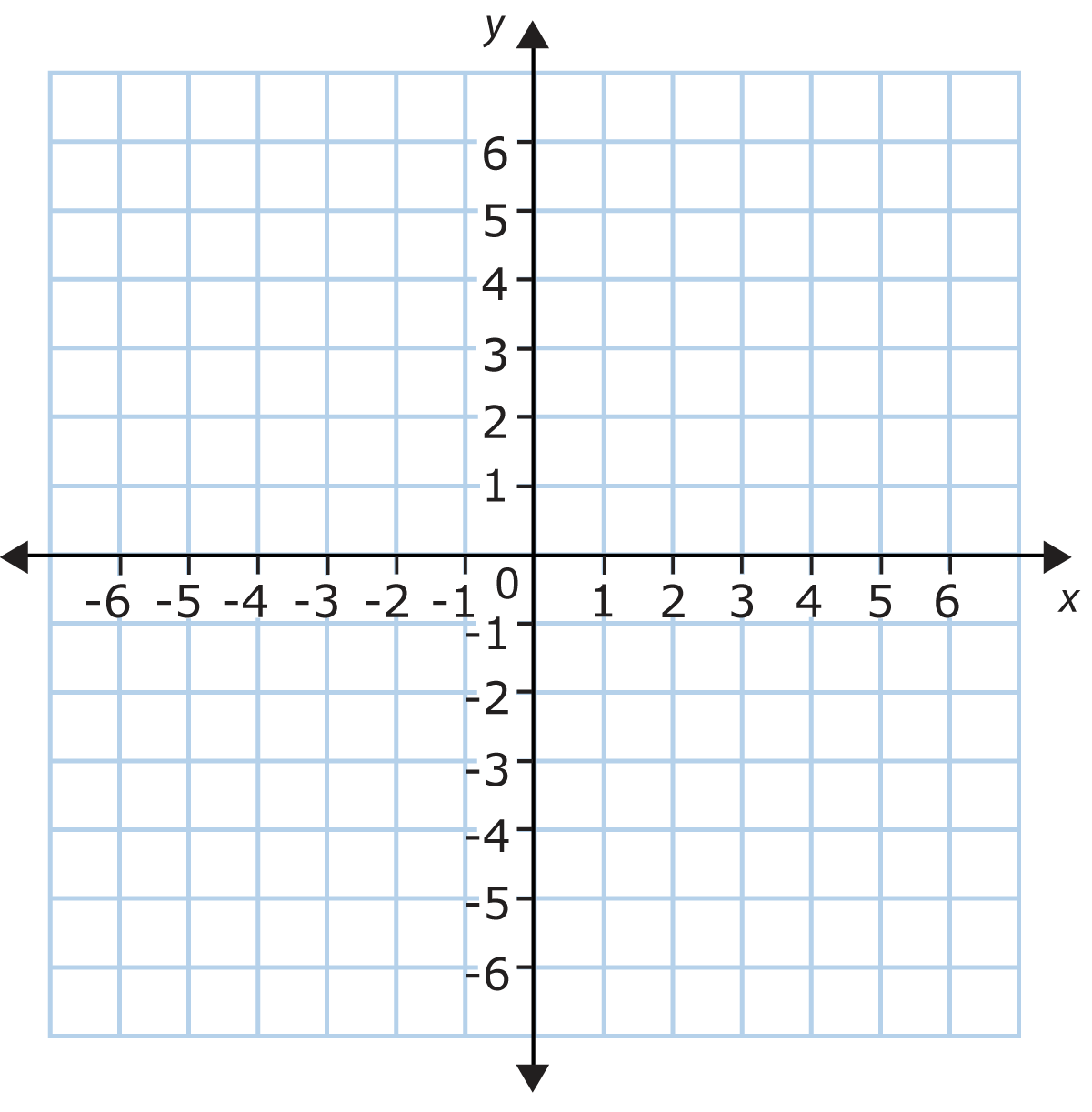
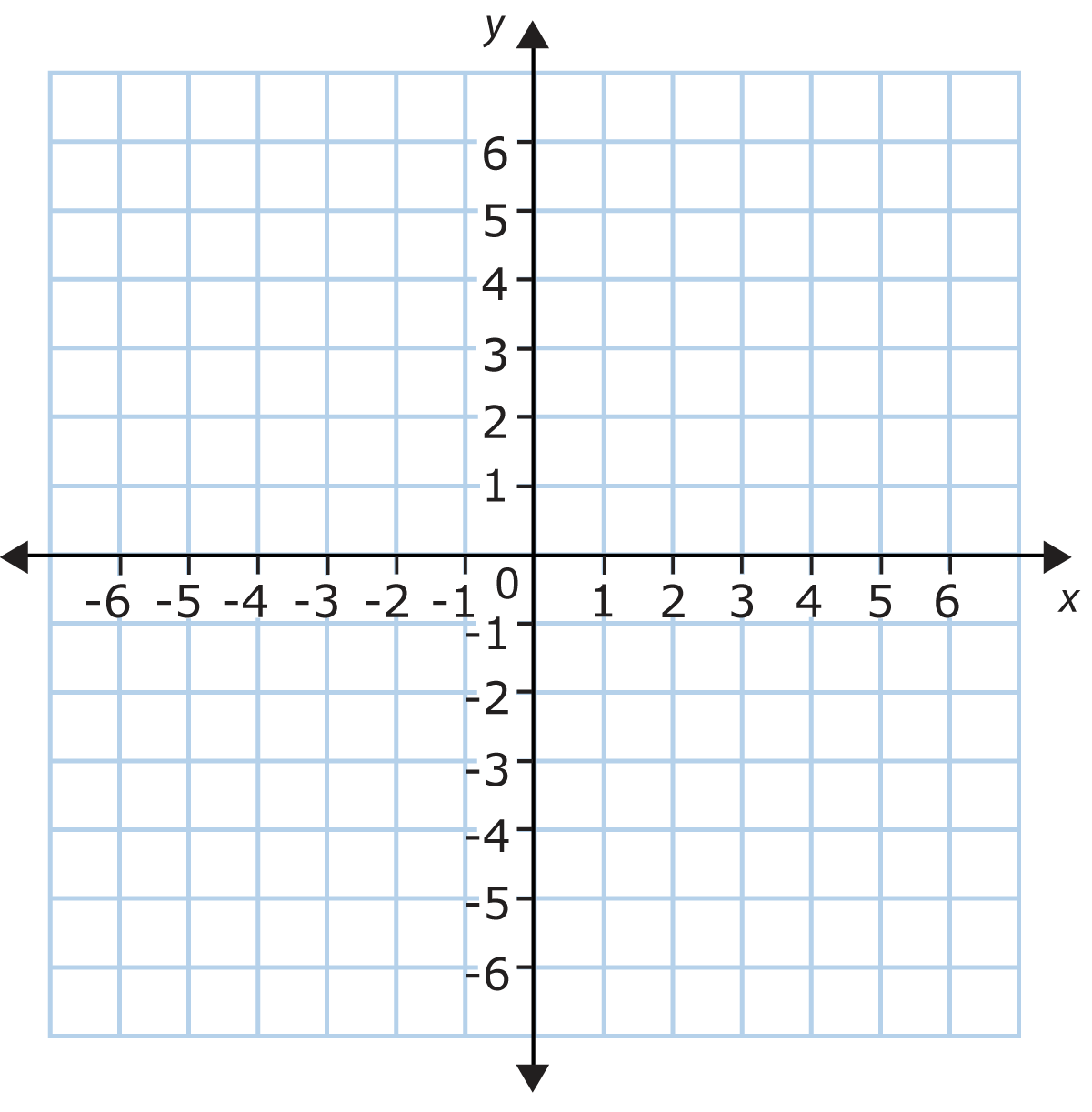
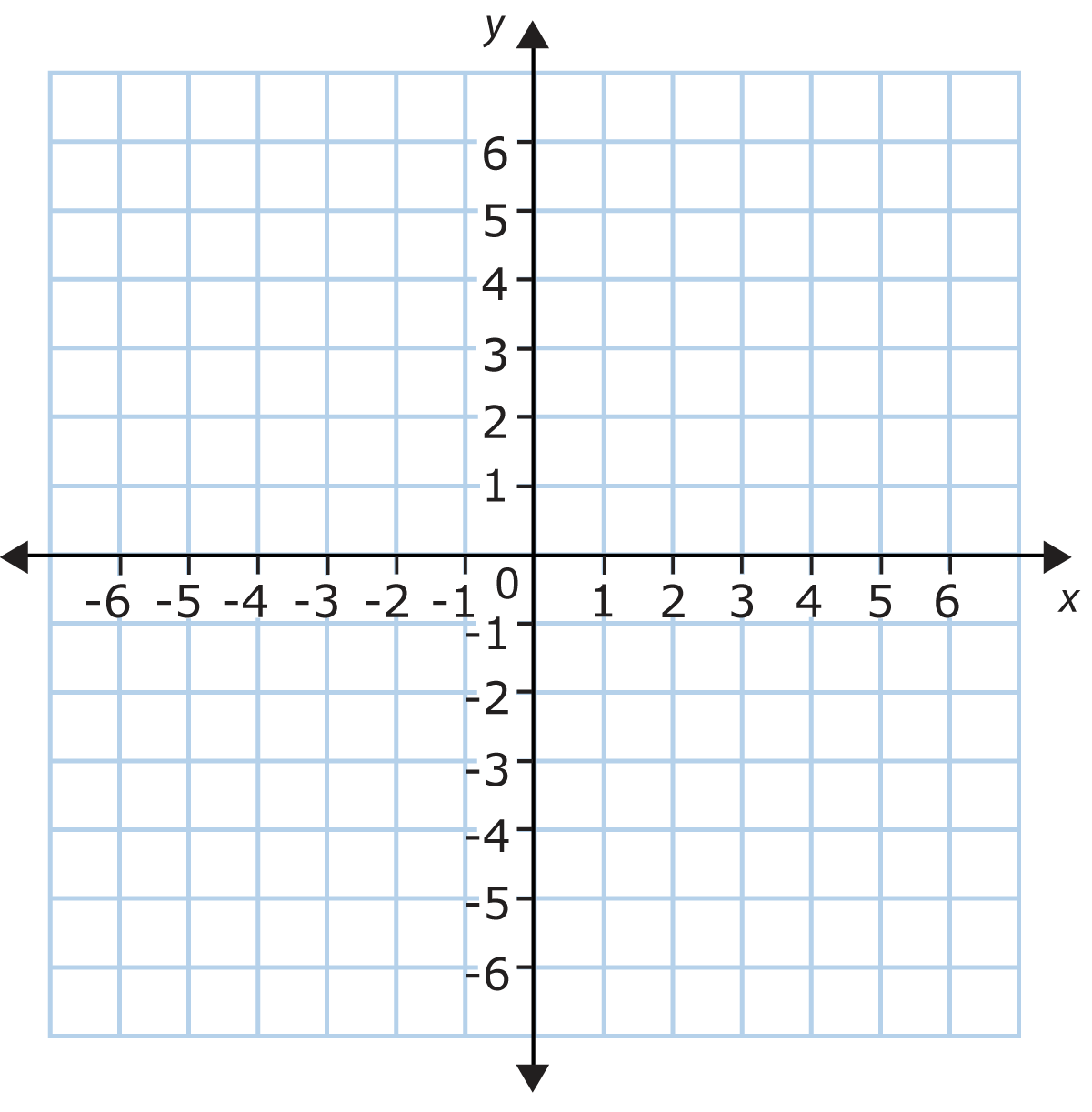
b) b)

c) c)

d) d)

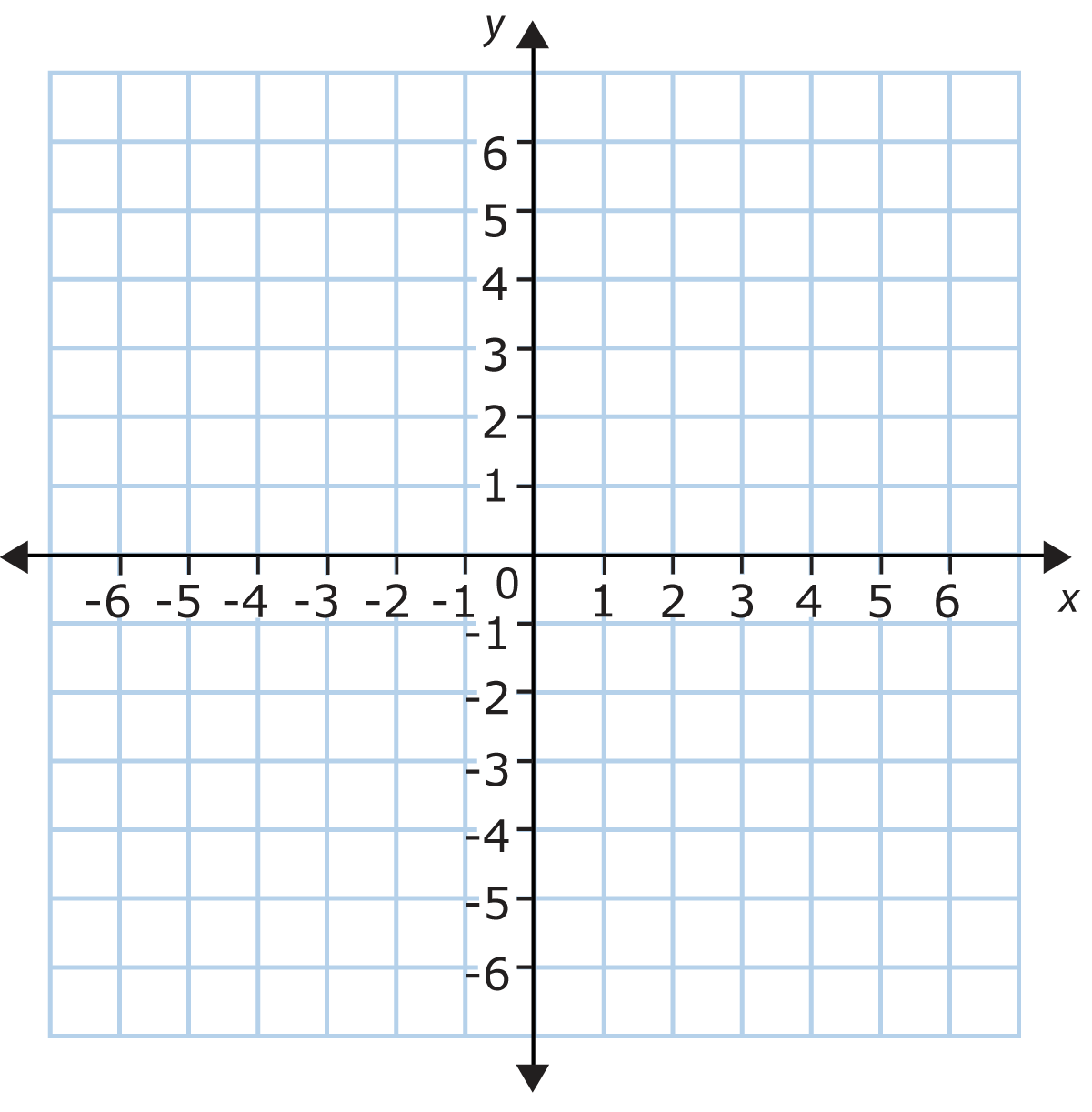
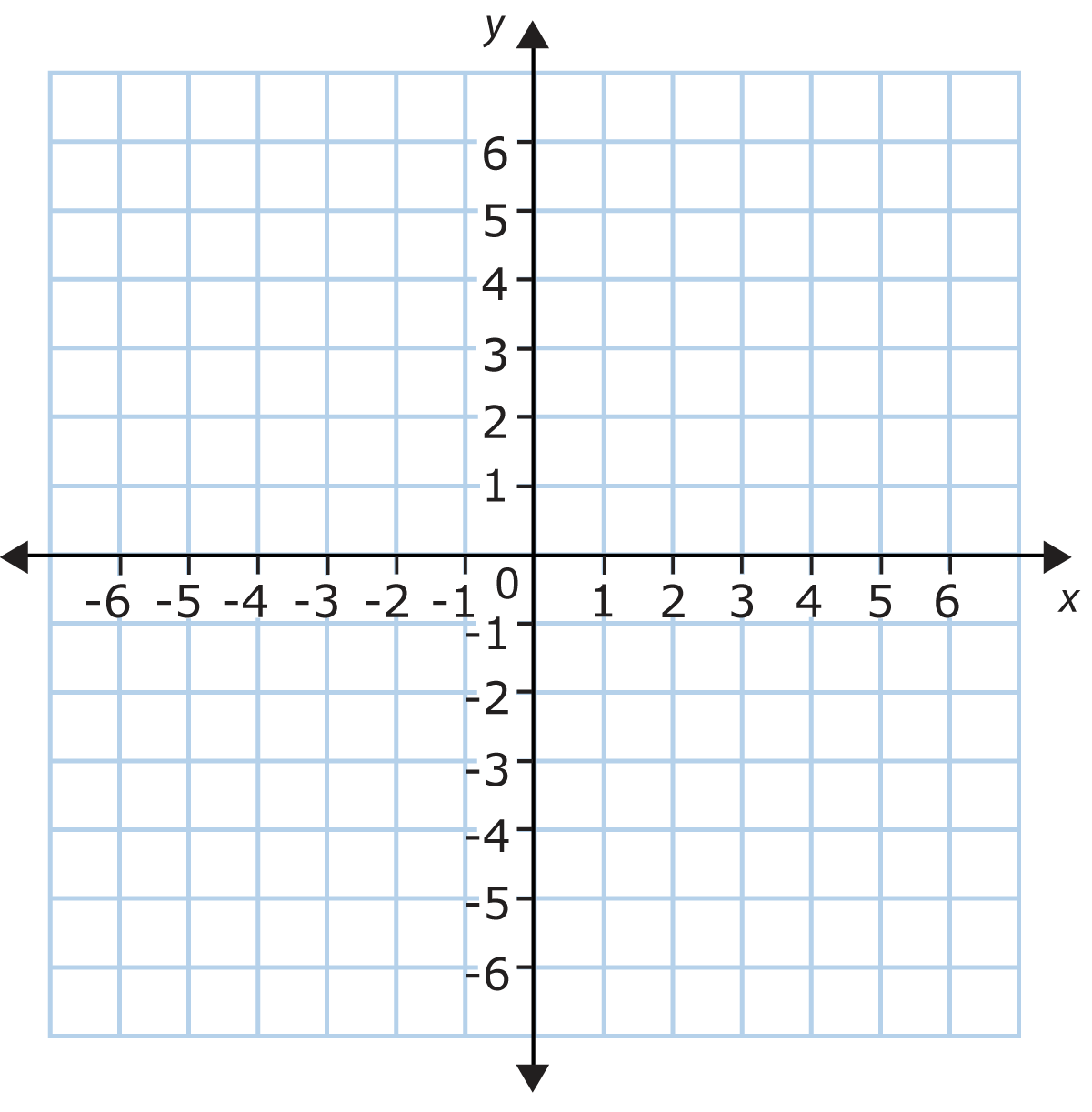
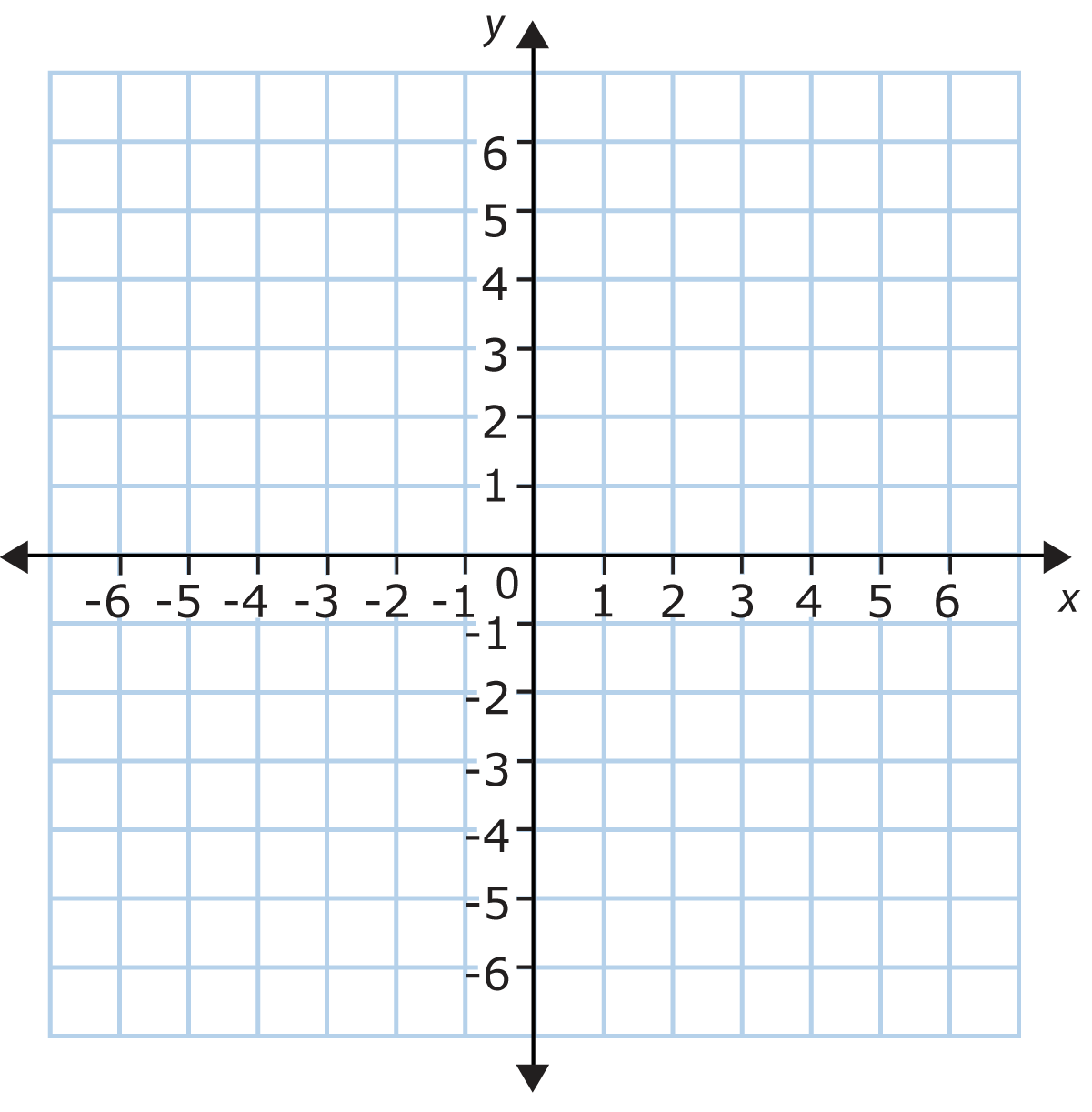
e) e)

**Sketch a graph of the following functions and give their domain and range.**

18) 19) 20)

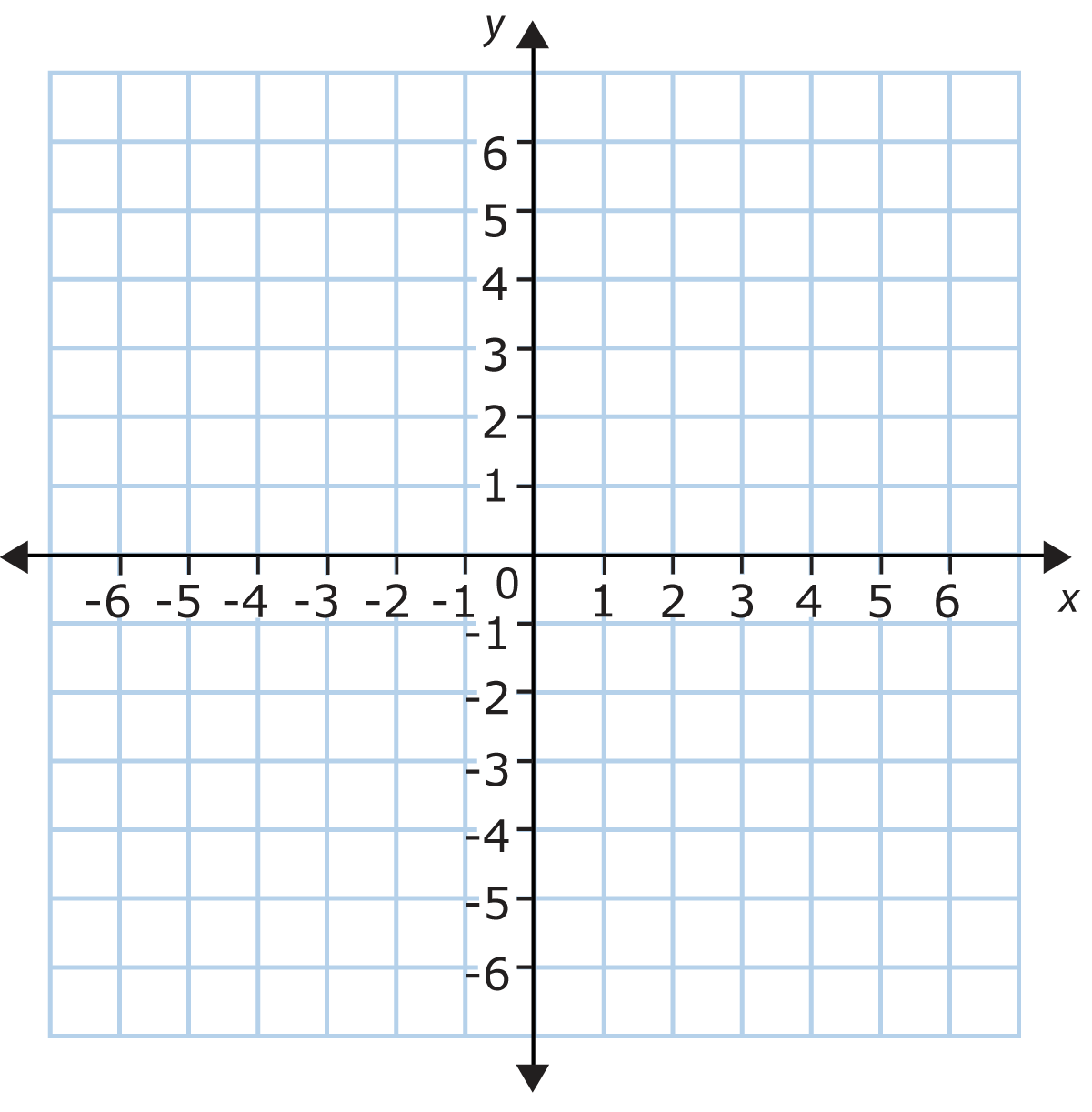
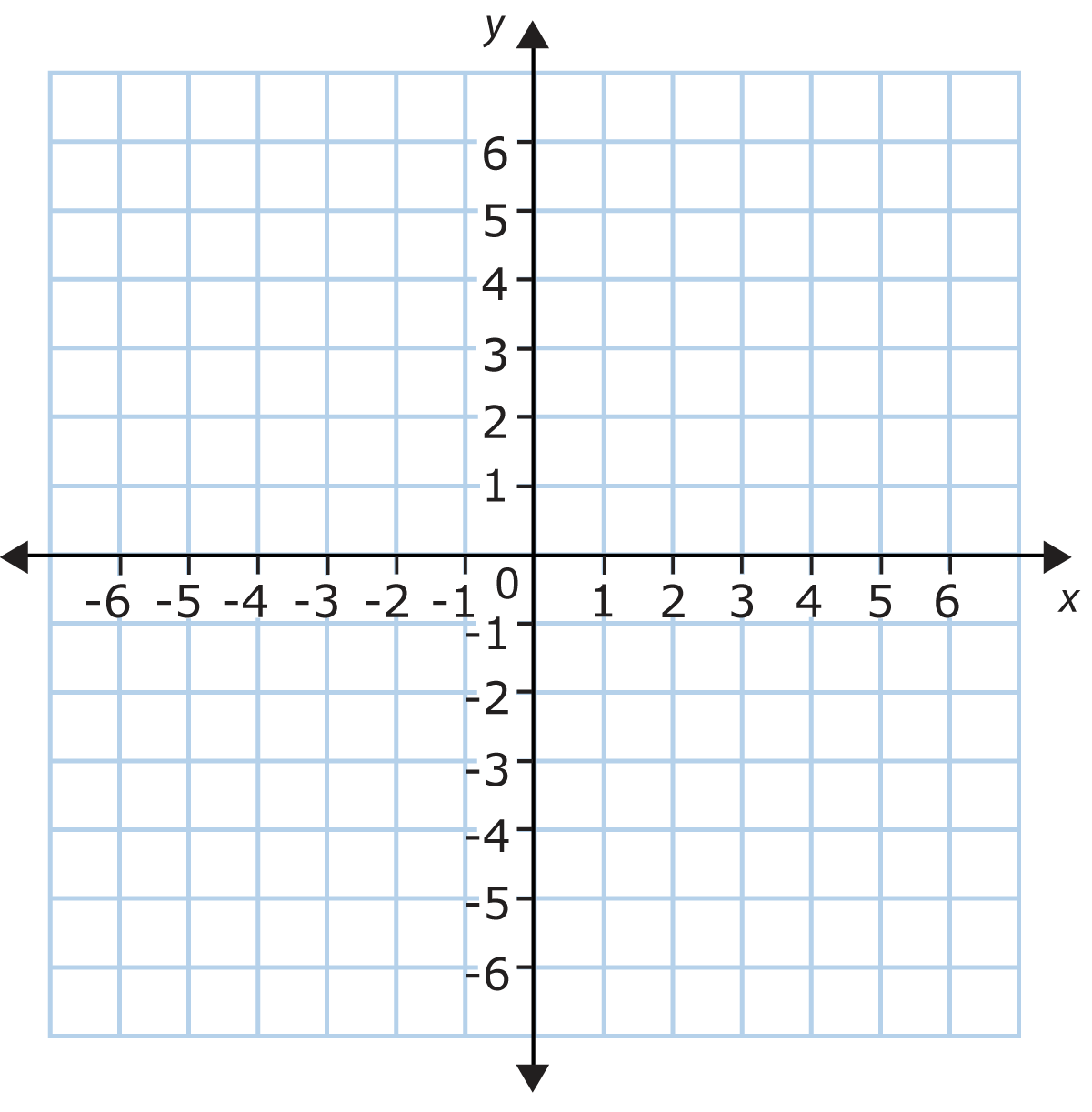
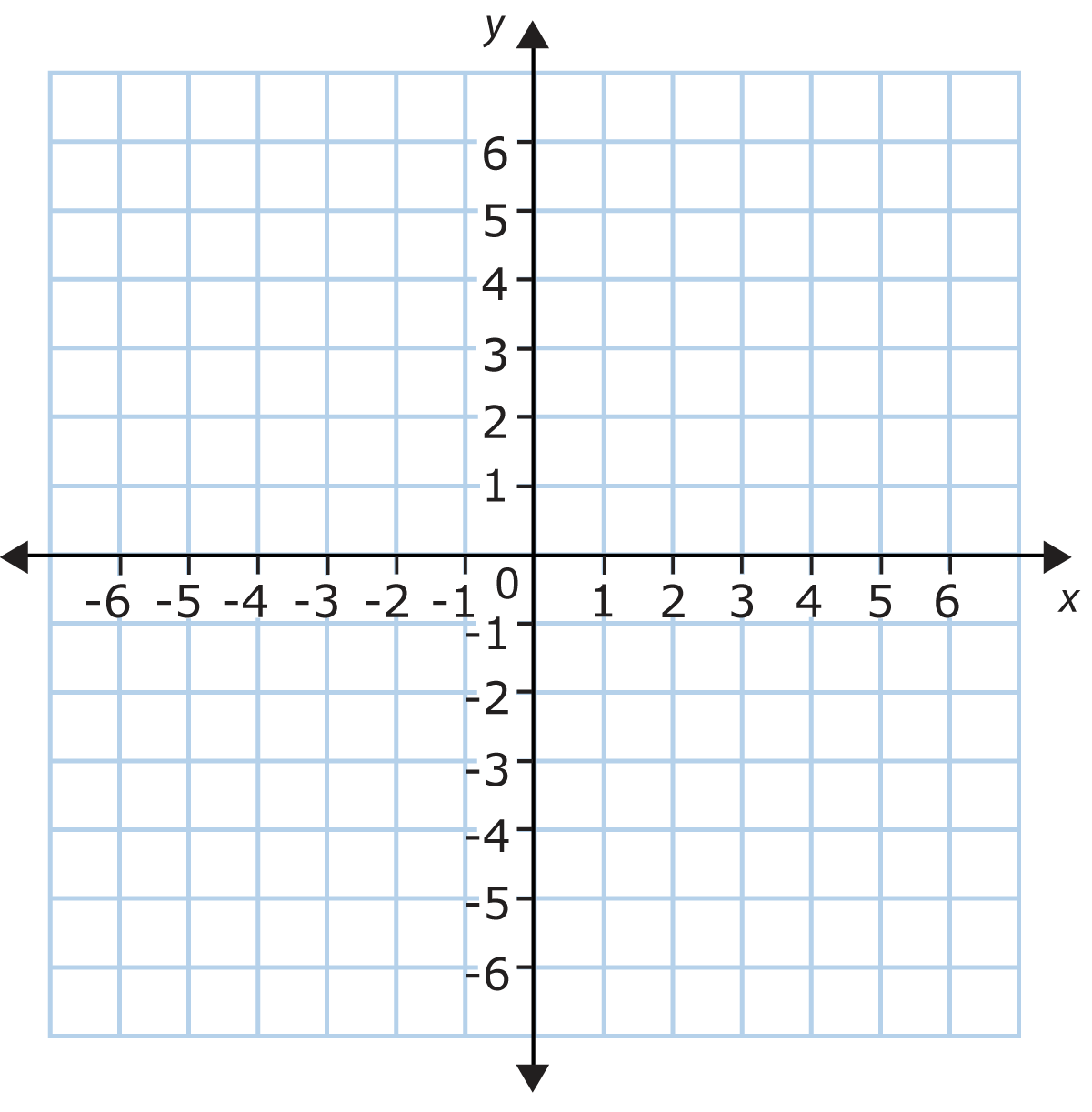
**D: D: D:**

**R: R: R:**

21) 22) 23)

**D: D: D:**

**R: R: R:**

24) 25) 26)

**D: D: D:**

**R: R: R:**